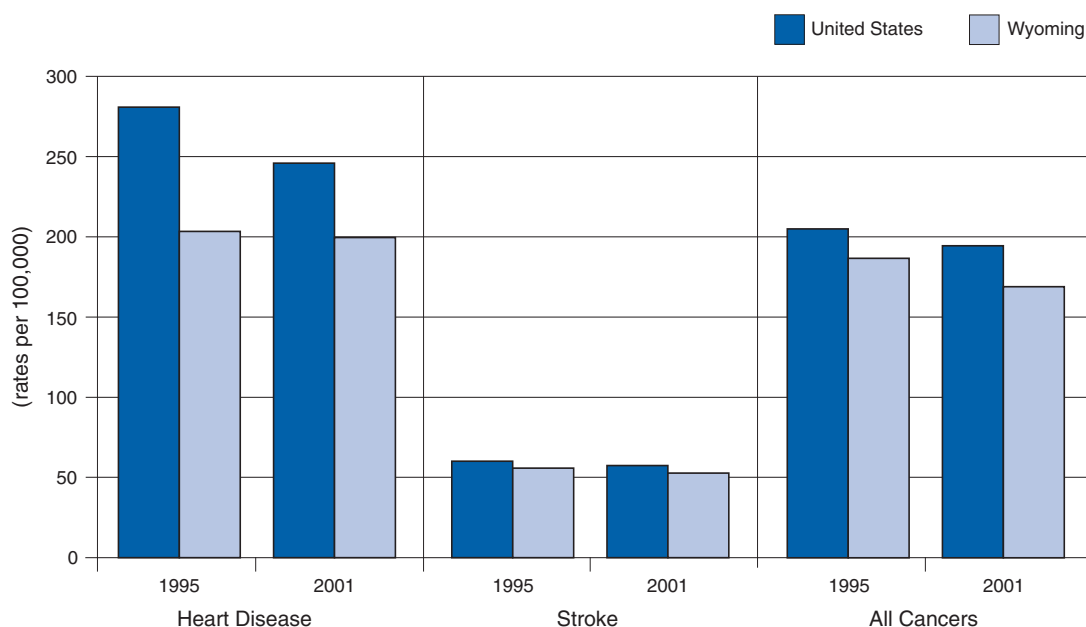


## Chronic Diseases: The Leading Causes of Death

### The Leading Causes of Death

United States and Wyoming, 1995 and 2001



Source: National Center for Health Statistics, 2003

### The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

### Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

# The Leading Causes of Death and Their Risk Factors

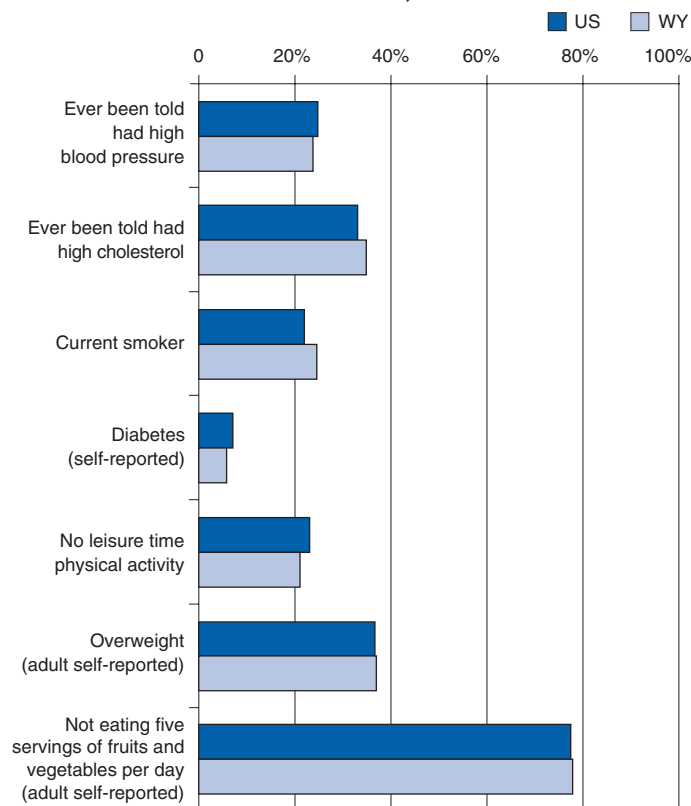
## Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Wyoming, accounting for 985 deaths or approximately 24% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the fifth leading cause of death, accounting for 260 deaths or approximately 7% of the state's deaths in 2001.

### Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

## Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 1,000 are expected in Wyoming. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 2,430 new cases that are likely to be diagnosed in Wyoming.

Estimated Cancer Deaths, 2004

Cause of death	US	WY
All Cancers	563,700	1,000
Breast (female)	40,110	+
Colorectal	56,730	110
Lung and Bronchus	160,440	260
Prostate	29,900	80

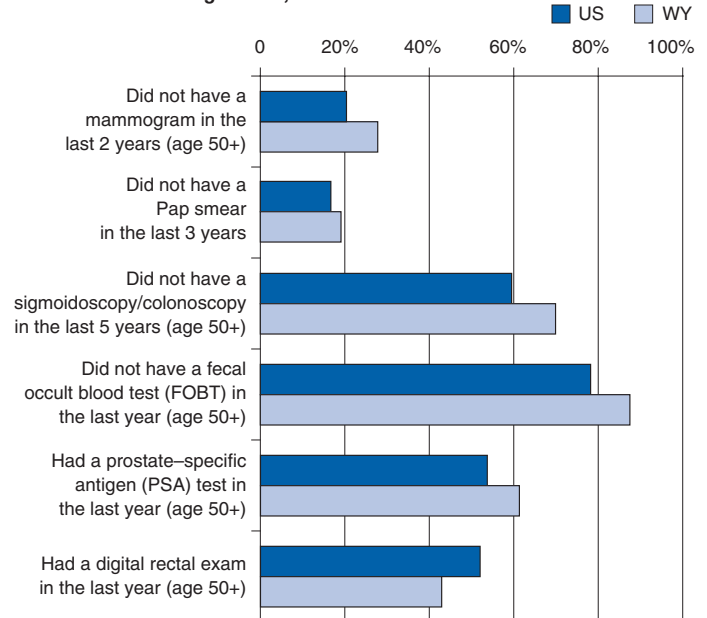
+ Represents fewer than 50 deaths.

Source: American Cancer Society, 2004

### Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

# Wyoming's Chronic Disease Program Accomplishments

## Examples of Wyoming's Prevention Successes

- Statistically significant decreases in cancer deaths among men across all races, with the greatest decrease occurring among white, non-Hispanic men (266.7 per 100,000 in 1990 versus 219.9 per 100,000 in 2000).
- An 8.9% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 35.5% in 1992 to 27.8% in 2002).
- Lower prevalence rates than the corresponding national rates for self-reported high blood pressure (23.8% in Wyoming versus 24.8% nationally).

## CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Wyoming in the areas of cancer, heart disease, stroke, and related risk factors.

### CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Wyoming, FY 2003

<b>SURVEILLANCE</b>	
Behavioral Risk Factor Surveillance System (BRFSS) <i>Wyoming BRFSS</i>	\$165,702
National Program of Cancer Registries <i>Wyoming Cancer Surveillance Program</i>	\$417,474
<b>CHRONIC DISEASE PREVENTION AND CONTROL</b>	
Cardiovascular Health Program	\$0
Diabetes Control Program <i>Wyoming Diabetes Prevention and Control Program</i>	\$275,000
National Breast and Cervical Cancer Early Detection Program <i>Wyoming Department of Health, Breast and Cervical Cancer Early Detection Program</i>	\$719,091
National Comprehensive Cancer Control Program	\$0
WISEWOMAN	\$0
<b>MODIFYING RISK FACTORS</b>	
National Tobacco Prevention and Control Program <i>Wyoming Tobacco Prevention and Control Program</i>	\$975,274
State Nutrition and Physical Activity/Obesity Prevention Program	\$0
Racial and Ethnic Approaches to Community Health (REACH 2010)	\$0
<b>Total</b>	<b>\$2,552,541</b>

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

### Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Wyoming that fall into other health areas. A listing of these programs can be found at <http://www.cdc.gov/nccdphp/states/index.htm>.

# Opportunities for Success

## Chronic Disease Highlight: Cardiovascular Disease

Cardiovascular disease (CVD), including coronary heart disease and stroke, is the number one cause of death in the state of Wyoming, accounting for almost 33% of all deaths in 2001. The age-adjusted death rate for heart disease in Wyoming decreased from 232.1 per 100,000 in 1999 to 216.9 per 100,000 in 2000; the state's age-adjusted death rate for stroke also decreased, from 61.5 per 100,000 in 1999 to 58.1 per 100,000 in 2000.

However, the major risk factors associated with CVD remain prevalent in Wyoming's population. According to 2003 data from the Behavioral Risk Factor Surveillance System, 22.4% of Wyoming's adult population reported that they had been diagnosed with high blood pressure, 30.5% reported that they had been diagnosed with high blood cholesterol, and 4.5% reported that they had been diagnosed with diabetes. Thirty seven percent of Wyoming residents are overweight and nearly 20.1% are obese. Additionally, in 2003, more than one fifth of all adults in the state did not engage in any leisure time physical activity, and 24.6% were smokers.

The burden of CVD is not limited to morbidity and mortality. Between July 2000 and June 2001, 18,783 people were discharged from Wyoming hospitals with either a primary or a secondary diagnosis of CVD, resulting in a cost of over \$246 million. While CVD-related diagnoses accounted for only 35% of the total number of diagnoses, the cost of CVD and CVD-related diagnoses accounted for 54% of the total cost of all hospital discharges.

In an effort to address the problem of CVD in Wyoming, the Cardiovascular Disease Program works to prevent, detect, and monitor cardiovascular disease within the state. The CVD Program provides cardiovascular disease health promotion and disease prevention programs to communities and to health care providers. The CVD Program focuses on primary prevention, where CVD-related risk factors such as physical activity, nutrition, high blood pressure, and high blood cholesterol are addressed. The CVD Program also sponsors the Wyoming 5 A Day Program, and the Wyoming Walks Program.

Text adapted from *The Burden of Cardiovascular Disease in Wyoming* (2003).

## Disparities in Health

Across the country, American Indians and Alaska Natives (AI/ANs) comprise more than 500 federally recognized tribes and represent 1% of the U.S. population. Compared with other racial and ethnic minorities, AI/ANs have the highest poverty rate, 26%, which is 2 times the national rate. In addition to high poverty levels, AI/ANs are experiencing growing health disparities.

AI/ANs are the second largest minority population in Wyoming, representing approximately 3% of the state's population. Over half of this population lives in Fremont County, home of the Wind River Indian Reservation. Wyoming's AI/AN population lives in extreme poverty: 58% of the population lives below the poverty level.

Wyoming's AI/AN populations have high rates of heart disease, cancer, liver disease, and diabetes. The state's AI/ANs are more than twice as likely to die from heart disease (179.1 per 100,000) than the nation's AI/AN population (76 per 100,000). Wyoming's AI/AN population has much higher death rates for diabetes (47.8 per 100,000) and liver disease (57.8 per 100,000) than the national rates for AI/ANs (27.3 per 100,000 for diabetes and 24.3 per 100,000 for liver disease). Likewise, Wyoming's AI/AN populations are more likely to die from cancer than AI/ANs nationally (113.4 deaths per 100,000 versus 80.8 deaths per 100,000).

In September 2000, the Minority Health Program in the Wyoming Department of Health received funding to conduct a statewide minority health assessment. The findings of the assessment will help the state to better clarify the areas of greatest need among racial and ethnic populations.

## Other Disparities

- **Overweight:** In Wyoming, AI/ANs are more likely to be overweight than whites (41% versus 29%).
- **Smoking:** Wyoming's AI/ANs are more likely to smoke than whites (39% versus 24%).
- **Mammograms:** AI/AN women in Wyoming are more likely to have had a mammogram in the past 2 years than their white counterparts (74.8% versus 65.6%).
- **High blood pressure:** AI/ANs have lower rates of high blood pressure than whites (18% versus 23%).

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For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962  
E-mail: [ccdinfor@cdc.gov](mailto:ccdinfor@cdc.gov) | Web: <http://www.cdc.gov/nccdphp>